A SYNOPSIS, AND DESCRIPTIONS OF THE NEARCTIC SPE-CIES OF SAWFLIES OF THE GENUS XYELA, WITH DE-SCRIPTIONS OF OTHER NEW SPECIES OF SAWFLIES.

By S. A. Rohwer,

Of the Bureau of Entomology of the United States Department of Agriculture.

The following paper, which is a contribution from the Branch of Forest Insects, Bureau of Entomology, United States Department of Agriculture, contains a synopsis of the Nearctic species of the genus *Xyela* and descriptions of certain other sawflies. The types of all the new species are in the collections of the United States National Museum.

Family XYELIDÆ

Genus XYELA Dalman

Table to the Nearctic species of Xyela.

Fer	nales1
	les
1.	Antennal furrows incomplete but represented by elongate foveæ basally 2
	Antennal furrows complete to the ocelli
2.	Clypeus not carinate to the apex and without a small median tooth. salicis, p. 266
	Clypeus carinate to the apex, with a small median tooth
3.	Between the bases of the antennæ is a carinabakeri, p. 267
	No carina between the bases of the antennæ 4
4.	Clypeus with a large, sharp, triangularly shaped tooth; body palepini, p. 267
	Clypeus with only a low, rounded tooth; body black
5.	Area between the antennæ flatalni, p. 268
	Area between the antennæ depressedwinnemanæ, p. 268
6.	Clypeus with a large, sharp, triangularly shaped tooth
	Clypeus without a large, sharp, triangularly shaped tooth
7.	A small tubercule between and above the bases of the antennæminor, p. 269
	No such tubercule between the bases of the antennæ
8.	Scutellum with a strong median furrow; head and mesonotum shining, very
	finely granular; ovipositor but little longer than the abdomen; mesepister-
	num palepini, p. 267
	Scutellum without a median furrow; head and mesonotum opaque, coarsely
	granular; ovipositor much longer than the abdomen; mesepisternum
	blackluteopicta, p. 269

PROCEEDINGS U. S. NATIONAL MUSEUM, VOL. 45-NO. 1981.

9.	Front between the antennal furrows with a broad, shallow depression.errans, p. Front between the antennal furrows convex or flat		
10			
10.	Scutellum with strong impressed median linebrunneiceps, p.	•	269
	Scutellum without an impressed median line.		
11.	Postocellar line subequal with the ocelloccipital line		
10	Postocellar line shorter than the ocelloccipital line		
12.	Ovipositor color of the abdomen; body shining, finely granularslossonæ, p.	•	270
	Ovipositor paler than the abdomen; body opaque, coarsely granular.		071
	nevadensis, p.		
13.	Antennal furrows obsolete dorsally		
	Antennal furrows complete to the ocelli		19
14.	Clypeus with a large, sharp, triangularly shaped tooth		15
	Clypeus without a large, sharp, triangularly shaped tooth		
15.	Legs yellow; body variegated with black and yellowpini, p		
	Femora black; body blackalni, p		
16.	Clypeus without a tuberculesalicis, p		
	Clypeus with a tubercule		
17.	Body and legs ferruginoussimilis, p		271
	Femora dusky black or black variegated with yellow		
18.	Hypopygidium regularly tapering to the apexminor, p	•	269
	Hypopygidium with the sides gently concavebakeri, p		267
19.	Clypeus with a large, sharp, triangularly shaped tooth		20
	Clypeus without a large, sharp, triangularly shaped tooth		21
20.	Hypopygidium broadly roundedpini, p		
	Hypopygidium narrowly roundedluteopicta, p		269
21.	Clypeus truncate or nearly socalifornica, p	۰.	272
	Clypeus with a low median tooth		
22.	Middle fovea obsolete		
	Middle fovea indicated		23
23.	Transverse median of the fore wings received in the middle of the first dis-	-	
	coidal cellminor, p).	269
	Transverse median of the fore wings received beyond the middle of the first	t	
	discoidal cell		272

XYELA SALICIS, new species.

Female.—Length to the apex of the abdomen 3 mm.; length of the ovipositor 1.5 mm. Clypeus not carinate; anterior margin broadly rounded; supraclypeal area convex; middle fovea obsolete; antennal furrows obsolete dorsally; behind each lateral ocellus is a faint depression; postocellar furrow obsolete; postocellar line slightly longer than the ocelloccipital line; head and thorax opaque, finely granular; fourth and fifth antennal joints subequal, scutellum not impressed; stigma sharply oblique on the first transverse radius, about twice as long as its greatest width; sheath straight below, straight above until near the apex when it is sharply oblique. Black; antennæ, palpi, the femora beneath, tibiæ and tarsi and sheath piceous; wings hyaline, iridescent; venation pale brown.

Male.—Length 2.75 mm. Clypeus without a tubercule or a carina, anterior margin nearly truncate, very slightly produced in the middle; supraclypeal area convex; middle fovea obsolete;

antennal furrows obsolete dorsally; postocellar line slightly longer than the ocelloccipital line; postocellar furrow present, angulate anteriorly; postocellar area not defined laterally; fourth antennal joint slightly shorter than the fifth; head and thorax opaque, rather coarsely granular; scutellum not impressed; hypopygidium broadly rounded apically. Black; flagellum, tibiæ and tarsi piceous; wings hyaline, iridescent; venation pale brown.

Grahams Peak, Rio de los Pinos, Colorado. Described from 1 female and 25 males collected May 11, 1899, on *Salix* flowers, by C. F. Baker.

Type.—Cat. No. 15376, U.S.N.M.

XYELA BAKERI Konow.

Xyela bakeri Konow, Ent. Nachr., vol. 24, 1898, p. 327. Xyela negundinis Cockerell, Can. Ent., vol. 39, 1907, p. 324.

The type of Xyela negundinis Cockerell agrees with the original description of Xyela bakeri and with specimens which have been determined as bakeri. The type of negundinis is in the United States National Museum and is Cat. No. 15214.

XYELA PINI, new species.

Female.-Length to apex of the abdomen 2.25 mm.; length of ovipositor 1.25 mm. Anterior margin of the clypeus with a broad, large, triangularly-shaped median tooth, the surface with a faint median tubercule; supraclypeal area convex; middle fovea obsolete; antennal furrows obsolete dorsally (in some of the paratypes the antennal furrows seem to be present although they are so strongly marked with brown that this may be the confusing point); postocellar furrow faintly indicated; postocellar line slightly shorter than the ocelloccipital line; fourth antennal joint subequal in length with the fifth; head and thorax subopaque, finely granular; scutellum longitudinally depressed; stigma about three times as long as its greatest width; sheath concave below, convex above, with the apex above strongly tapering to a sharp point. Yellowish; antennæ metathorax above and abdomen above piceous; a spot occupying the area of the middle fovea, antennal furrows, postocellar area, elongate spot on the vertex between the ocellus and the eye, posterior face of the head, large lateral spots on the mesoscutum, small median spots on the mesoscutum, and apex of the scutellum rufo-ferruginous; wings hyaline, iridescent; venation pallid brown.

Male.—Length 2.5 mm. Anterior margin of the clypeus with a large, sharp, triangularly shaped median tooth, the surface with an elongate tubercule; supraclypeal area subconvex; middle fovea obsolete; antennal furrows obsolete dorsally; postocellar furrow

indicated; postocellar area defined laterally by faint furrows; postocellar line subequal with the ocelloccipital line; fourth and fifth antennal joints subequal; scutellum with a longitudinal impressed line; hypopygidium broadly rounded apically. Yellow; markings as in the female.

Call, Texas. Two females and fifteen males collected February 28, 1905, by W. F. Fiske. Recorded under "Bureau of Entomology Number Hopk, U. S. 3433a," which is connected with a note saying that these insects literally swarmed about a single tree of *Pinus palustris*.

Type.-Cat. No. 15377, U.S.N.M.

XYELA ALNI, new species.

Female.—Length to the apex of the abdomen 3 mm.; length of the ovipositor 2 mm. Clypeus carinate to the apex with a small median tooth; supraclypeal area flat; middle fovea obsolete; antennal furrows obsolete dorsally; postocellar area not defined; postocellar line slightly longer than the ocelloccipital line; head and mesonotum subopaque, finely granular; fourth and fifth antennal joints subequal; stigma about twice as long as its greatest width; sheath below straight, with apex above sharply oblique. Black; palpi, antennæ and legs piceous; wings hyaline, iridescent; venation pale brown.

Male.—Length 2.75 mm. Clypeus with a median tubercule, the anterior margin with a large, triangularly shaped median tooth; punctuation and aulation of the head as in the female; hypopygidium regularly, rather broadly rounded to the apex. Black; palpi, flagellum, tibiæ and tarsi pale piceous; wings hyaline, iridescent; venation very pale brown.

Great Falls, Virginia. Described from 2 females and 4 males collected March 20, by Nathan Banks. Some of them labeled as coming from flowers of alder (*Alnus*).

Type.-Cat. No. 15378, U.S.N.M.

XYELA WINNEMANÆ, new species.

Female.—Length to the apex of the abdomen 3 mm.; length of the ovipositor 2 mm. Clypeus carinate to the apex and with a median tooth; antennal furrows obsolete dorsally; the middle fovea represented by a large, shallow depression; postocellar furrow well defined but the postocellar area is not defined laterally; postocellar line subequal with the ocellocular line; head and thorax shining, finely granular; fourth antennal joint slightly shorter than the fifth; stigma sharply tapering beyond the first transverse radius, about two and one-half times as long as its greatest width; sheath straight above and below, but the apex above sharply oblique; wings hyaline,

iridescent; venation pale brown. Black; palpi, mandibles, apices of femora and legs below femora pale piceous.

Plummers Island, Maryland. Described from 1 female collected March 4, 1910, by H. S. Barber.

Type.-Cat. No. 15379, U.S.N.M.

XYELA MINOR Norton.

Xyela minor NORTON, Trans. Amer. Ent. Soc., vol. 2, 1868, p. 349.

Type.—Collection American Entomogical Society.

XYELA LUTEOPICTA Cockerell.

Xyela luteopicta Cockerell, Can. Ent., vol. 34, 1902, p. 194.

Type.—In the Philadelphia Academy of Natural Sciences.

Originally described from Las Vegas, New Mexico, but is represented in the United States National Museum collection by many specimens from Colorado (without definite locality).

XYELA ERRANS, new species.

Female.—Length to apex of the abdomen 3 mm.; length of the ovipositor 2.25 mm. Clypeus with a faint carina, the anterior margin slightly produced, in the middle a low rounded tooth; supraclypeal area flat; middle fovea obsolete; antennal furrows complete to beyond the anterior ocellus; postocellar area defined laterally by faint furrows; postocellar furrow obsolete; postocellar line subequal with the ocelloccipital line; fourth and fifth antennal joints subequal; head and thorax subopaque, finely granular; stigma gently tapering from the first transverse radius, about two and one-half times as long as the greatest width; sheath concave below, convex above, gradually tapering above and below. Rufo-ferruginous; mandibles, clypeus, faint lines on the vertex and a spot at the top of the eye, palpi, legs below the apices of the coxæ and tegula yellow; wings hyaline, iridescent; venation pallid brown.

North Carolina. Described from 1 female from the collection of C. V. Riley.

Type.-Cat. No. 15380, U.S.N.M.

XYELA BRUNNEICEPS, new species.

Female.—Length to the apex of the abdomen 3.5 mm.; length of the ovipositor 2.75 mm. Clypeus with a faint median carina, the anterior margin slightly produced from the middle into a broad low tooth; supraclypeal area convex; middle fovea obsolete; antennal furrows complete behind the anterior ocellus; postocellar furrow obsolete; postocellar line slightly shorter than the ocelloccipital line; fourth and fifth antennal joints subequal; head and thorax subopaque, finely granular; scutellum with a longitudinal impressed line; stigma sharply tapering from the first transverse radius, about two and onethird times longer than the greatest width; sheath narrow, gradually tapering to the apex; head brunneus; mesoscutum with the exception of the two spots laterally, and pronotum except a median spot brunneus; spot on the pronotum, prescutum, spots on the mesoscutum, scutellum, metathorax, abdomen above and sheath dark piceous; legs rufo-ferruginous; wings hyaline, iridescent; venation pallid.

Sugar Loaf Mountain, Boulder County, Colorado. One female collected May 18, 1907, at an altitude of 8,000 feet, by S. A. Rohwer. Swept from the foliage of *Arctoclaphylus uva-ursi*.

Type.—Cat. No. 15381, U.S.N.M.

XYELA DISSIMILIS, new species.

Female.—Length to the apex of the abdomen 2.5 mm.; of the ovipositor 1.5 mm. Clypeus with a sharp median carina, anterior margin broadly rounded; supraclypeal area convex; middle fovea obsolete; antennal furrows complete to behind the anterior ocellus; postocellar area undefined laterally by furrows; postocellar furrow obsolete; postocellar line subequal with the ocelloccipital line; fourth antennal joint slightly shorter than the fifth; scutellum without a longitudinal impressed line; stigma about two and one-third times longer than its greatest width; sheath gently tapering to the apex. Black; antennæ piceous; clypeus, labrum, mandibles, palpi, head except antennal furrows, the ocellar and postocellar areas, elongate spots on the vertex, spot behind the middle of the eyes to the spot occupying the area of the middle fovea, spots on the pronotum, scutellum, prescutum, and middle of the scutum yellow; legs yellowish; wings hyaline, iridescent; venation pallid.

Banff, Alberta, Canada. Described from 1 female collected by N. B. Sanson.

Type.—Cat. No. 15382, U.S.N.M.

XYELA SLOSSONÆ, new species.

Female.—Length to the apex of the abdomen, 2.75 mm.; length of the ovipositor, 1.75 mm. Clypeus with a rather sharply defined carina, anterior margin produced into a low rounded tooth in the middle; middle fovea obsolete; antennal furrows complete to behind the anterior ocellus; postocellar line slightly shorter than the ocelloccipital line; postocellar area faintly defined laterally by furrows; postocellar furrow obsolete; head and thorax shining, finely granular; fourth antennal joint subequal in length with the fifth; scutellum not impressed; stigma rounded below, hardly twice as long as its greatest width; sheath stout, concave below, convex above, the apex above sharply convex. Ferruginous; antennæ, metathorax, abdomen above to the sheath piceous; antennal furrows, spot occupying the area which is usually occupied by the middle fovea, postocellar area

to elongate spots on the vertex between the ocelli and the eye, pronotum, sides of the mesoscutum rufo-ferruginous; tibiæ and tarsi rufo-ferruginous; wings hyaline, iridescent; venation pallid.

Male.—Length, 2.5 mm. Clypeus with an incomplete, low carina, anterior margin produced into a very low rounded tooth; middle fovea obsolete; postocellar furrow indicated; postocellar area bounded laterally by fine furrows; postocellar line shorter than the ocelloccipital line; head and thorax shining, very finely granular; fourth and fifth antennal joints subequal; scutellum not impressed; hypopygidium broadly rounded apically. Rufo-ferruginous; antennæ, metathorax, abdomen above piceous; mandibles, clypeus, orbits except spot above, postocellar area laterally, prescutum, scutellum, tegula and legs yellowish.

Biscayne Bay, Florida. Described from 1 female and 1 male collected by Mrs. A. T. Slosson, for whom the species is named.

Type.-Cat. No. 15383, U.S.N.M.

XYELA NEVADENSIS, new species.

Female.—Length to the apex of the abdomen, 3.25 mm.; of the ovipositor, 1.75 mm. Clypeus with a taint median carina; anterior margin in the middle produced into a low, broadly rounded tooth; supraclypeal area convex; middle fovea obsolete; antennal furrows complete to behind the anterior ocellus; postocellar furrow obsolete, postocellar area defined laterally by line-like furrows; postocellar line distinctly shorter than the ocelloccipital line; scutellum with a longitudinal impressed line; stigma not quite twice as long as its greatest width; sheath gently tapering to the apex; body subopaque, finely granular. Rufo-ferruginous; antennæ, metathorax and abdomen above piceous; clypeus, labrum, mandibles, inner orbits, four lines on the vertex, triangular spot on the front inclosing a dark spot located where the middle fovea should be, spots on inner margin of the mesoscutum, sheath, legs below the coxæ yellowish; wings hyaline, iridescent; venation pallid.

Nevada. Described from 1 female. Type.—Cat. No. 15384, U.S.N.M.

XYELA SIMILIS, new species.

Male.—Length, 2 mm. Clypeus without a tubercule, anterior margin of the clypeus slightly produced into a broad rounded tooth; middle fovea indicated; antennal furrows obsolete dorsally; postocellar line subequal with the ocelloccipital line; postocellar area defined laterally by faint furrows; postocellar furrow obsolete; fourth and firth antennal joints subequal; head and thorax shining, finely granular; scutellum not impressed; stigma about two and one-half times longer than broad; hypopygidium rather narrowly rounded apically. Ferruginous; tergum ruto-piceous; wings hyaline, iridescent; venation pallid.

Call, Texas. Described from 1 male collected February 28, 1905, by W. F. Fiske and recorded under "Bureau of Entomology Number Hopk. U.S. 3433a."

Type.—Cat. No. 15385, U.S.N.M.

XYELA CALIFORNICA, new species.

Male.-Length 4.25 mm. Clypeus with a faint carina, the anterior margin without a median tooth, very nearly truncate; supraclypeal area flat: middle fovea represented by a tubercule: antennal furrows complete, meeting behind the anterior ocellus; postocellar furrow obsolete; postocellar area defined laterally by faint furrows; postocellar line distinctly shorter than the ocelloccipital line; fourth and fifth antennal joints subequal; head and thorax shining, finely granular; stigma strongly tapering beyond the first transverse radius; not quite twice as long as its greatest width; hypopygidium broadly rounded apically. Pale yellow; metathorax above and the abdomen above piceous; antennæ pale ferruginous; triangularly shaped spot occupying the area of the middle fovea, antennal furrows basally, two spots on the postocellar area, elongate spots on the vertex between the ocellus and the eye; spots on the sides of the mesoscutum and a small spot on the pronotum rufo-ferruginous; tarsi rufoferruginous; wings hyaline, iridescent; venation pale brown.

Alameda County, California. Described from 1 male collected in June by D. W. Coquillett.

Type.-Cat. No. 15386, U.S.N.M.

XYELA COLORADENSIS, new species.

Male.—Length 3 mm. Clypeus with a median tubercule, anterior margin produced in the middle into a low, rounded tooth; supraclypeal area flat; middle fovea indicated; antennal furrows complete to behind the anterior ocellus; postocellar area defined laterally by fine furrows; postocellar furrow obsolete; postocellar line subequal with the ocelloccipital line; fourth and fifth antennal joints subequal; head and thorax opaque, closely granular; scutellum not impressed; stigma about two and one-half times as long as its greatest width; hypopygidium broadly rounded apically. Black; antennæ, clypeus, labrum, palpi, head except spot occupying the area of the middle fovea, antennal furrows, postocellar area, ocellar area, posterior orbits, elongate spots between the ocelli and the eyes which are black, prescutum, large median spot on the scutum and the scutellum yellow; legs below the coxæ reddish yellow; wings hyaline; stigma pallid brown; venation pallid.

Colorado. One male from the C. F. Baker collection. *Type.*—Cat. No. 15387, U.S.N.M.

Family MEGALODONTIDÆ. Genus PAMPHILIUS Latreille. PAMPHILIUS (PAMPHILIUS) GREENEI, new species.

This species is allied to occeatus (Say) but the third joint of the antenna is shorter than the fourth and the tibiæ and tarsi are darker (in occeatus the third antennal joint is slightly longer than the fourth). Female.—Length 10 mm. Anterior margin of the clypeus truncate,

its surface shallowly, irregularly reticulate under a fine granulation; lateral supraclypeal area polished, impunctate; frontal crest strong; supraclypeal area gently convex; middle fovea elongate, poorly defined but breaking through the crest; antennal furrows complete to the vertex, breaking strongly through the crest; anterior ocellus surrounded by forrows which are V-shaped and join the postocellar furrow above; postocellar line about three-fourths as long as the ocellocular line; postocellar area rectangular, about one-third longer than wide; antennæ normal, the third joint about one-fourth shorter than the fourth; thorax, legs, and venation normal; sheath broadly rounded below, straight above; apex broadly rounded. Ochraceous, paler beneath; ocellar area, spot on the postocellar area, two spots on the vertex, four spots on the mesoscutum, a line on the anterior margin of the pronotum, two lines on the sides of the metathorax and abdomen meeting at the apex of the abdomen, piceous; antennæ except scape beneath, tibiæ except the anterior pair beneath and tarsi black; wings hyaline, vitreous; venation dark brown.

tarsi black; wings flyanne, viscous, venution data and a collected Castle Rock, Pennsylvania. Described from 1 female collected June 13, 1909, by Charles T. Greene, for whom the species is named. *Type.*—Cat. No. 15312, U.S.N.M.

Superfamily ORYSSOIDEA.

Genus ORYSSUS Latreille.

ORYSSUS ABIETIS Rohwer.

Oryssus abietes ROHWER, Proc. U. S. Nat. Mus., vol. 43, No. 1925, 1912, p. 153. By typographical error the second i was made into an e. The name should be *abietis* and not *abietes*.

Superfamily TENTHREDINOIDEA.

Family TENTHREDINIDÆ.

Subfamily ALLANTINÆ.

The oriental members of this subfamily contain some peculiarities in venation which are rather difficult to account for and which seem to indicate that the contraction of the second anal cell of the fore wing is not yet a stable character. It seems to show that the third anal vein is undergoing an evolution which tends to the loss of its apical

80459°-Proc.N.M.vol.45-13----18

portion and also tends to make the posterior portion less contracted and of the character found in the Tenthredininæ, and also shows how it may have given rise to certain of the more elongate Blennocampini. Examples of this may be found within the genera Xenapates and Allantidea where the third anal vein is entirely without the basal constriction and where the second anal cell is of the type found in the Tenthredininæ, but is separated from the first anal cell by the oblique cross vein. The following new genus adds another to the list which shows many peculiarities. In this new genus the third anal vein is almost entirely obliterated close to the margin of the wing just before it unites with the second and third anal veins. This gives the anal cell the appearance of Blennocampini with the exception that there is produced backwards a short stump near where the third anal should join the second anal. Why this curious condition should be found only in oriental members of this group is not known. It is not in the least unlikely that similar conditions will be found in other subfamilies; if so, these can be treated at some other time. Characteristic of this subfamily is the shape of the head, more especially in the clypcal region where the clypeus has the sides converging apically, the basal portion of the clypeus being well between the inner margins of the eves, and not as in Blennocampini where the basal portion of the clypeus is inserted lower down on the face, the apical margin extending to or beyond a line drawn tangent to the lowest portion of the

orbits; also in Blennocampini the clypeus is usually more nearly parallel sided.

ALLANTOPSIS, new genus.

Belongs to the subfamily Allantinæ, to the tribe Allantini where it is more closely related to *Allantidea*, but may be readily separated

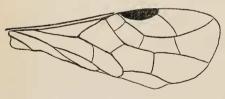


FIG. 1.—ANTERIOR WING OF ALLANTOPSIS THORACICA ROHWER.

from this last-mentioned genus by the nearly truncate clypeus and narrower posterior orbits. In some respects, namely, the obliteration of the apical portion of the third anal vein, it recalls Blennocampini, but in all the body characters it is more closely allied to the Allantinæ.

Anterior margin of the clypeus, truncate or nearly so; inner margins of the eyes converging to the clypeus; malar space wanting; posterior orbits narrow, about half as long as cephal-caudad diameter of the eye; lateral ocelli well below supraorbital line; antennal furrows present; antennæ short and stout, pedicellum much longer than apical width, the third antennal joint much longer than the fourth; the apical joints short, somewhat wider than the basal joints; thorax and legs, as in Allantini; venation of the anterior wings, as in the accompanying figure; posterior wings like *Allantus;* claws, cleft.

Type.—Allantopsis thoracica Rohwer.

ALLANTOPSIS THORACICA, new species.

Male.-Length 6 mm. Labrum, short, scarcely projecting beyond the clypeus, anterior margin narrowly rounded; clypeus very slightly arcuately emarginate; supraclypeal area narrow, gently convex. subtriangular in outline; supraclypeal and antennal foveæ confluent; middle fovea elongate, oval in outline, deep, walls sloping; antennal furrows, sharply defined; ocellar depression, heart-shaped; postocellar line shorter than ocellocular line; postocellar area broadly defined by sharp furrows about one-fourth wider than long; postocellar furrow bent anteriorly to unite with the furrow from the ocellar basin; antennæ, hairy, the third joint nearly as long as fourth and fifth combined, the third and fourth joints, oblique apically, so their inner margins are much shorter than the outer; head and thorax. shiny, with a few setigerous punctures; longer spur of the anterior tibiæ, curved; hypopygidium broadly rounded apically. Black: thorax above and most of the mesopleuræ, rufous; four posterior coxæ, trochanters, base of the posterior tibia and the base of the posterior basitarsis, yellow or yellowish white; the femora and anterior legs. dark piceous; head and thorax clothed with dense gray hair; venation dark brown, except in the lighter colored portions of the wings, where it is yellowish; wings dusky, subhyaline, a band from the base of the stigma and the basal portion of the wings, yellowish.

Lebong, India. One male, collected June, 1909, received from the Imperial Entomologist of Pusa, India.

Type.—Cat. No. 1446, U.S.N.M.

Genus ATHLOPHORUS Burmeister.

ATHLOPHORUS FORMOSACOLA Rohwer.

By oversight the color of the scutellum was omitted in the original description.¹ It is for the most part pale ferruginous, the rest black. In Enslin's table to the species of Athlophorus,² formosacola runs to javanus Enslin from which it may be separated, according to the description by the entirely black mesonotum, and different colored legs.

Subfamily TENTHREDININÆ,

Genus TENTHREDELLA Rohwer.

TENTHREDELLA CAROLINA, new species.

Allied to *Tenthredella lobata* (Norton), but the coarsely punctured mesonotum and the black metepisternum will readily separate *carolina* from *lobata*.

Female.—Length 11 mm. Labrum long, broadly rounded apically; clypeus deeply, subsquarely emarginate, lobes broad, subtruncate;

¹ Proc. U. S. Nat. Mus., vol. 39, 1911, p. 477. ² Tijd. voor Ent., 1912, June, p. 121.

supraclypeal area flat; antennal furrows strong, complete; ocellar basin small, well defined; postocellar furrow well defined, angulate anteriorly; postocellar area somewhat wider than long; postocellar line about two-thirds as long as ocellocular line; third antennal joint much longer than the fourth; mesonotum opaque with close, fine punctures; scutellar appendage coarsely punctured; stigma gently tapering to the apex; second cubital cell shorter on both the radius and cubitus than the third; receiving the first recurrent vein near the middle; third cubital cell receiving the second recurrent vein near the basal fourth; legs normal; sheath straight above, convex below, the apex rather narrowly rounded. Black; clypeus, labrum, spot on the mandibles, posterior margin of the eves, inner margin of the eves. posterior margin of the pronotum, tegulæ, 4 anterior legs beneath from the apices of the femora, the bases of the posterior tibiæ beneath, and sides of the propodeum yellow; wings hyaline, behind the bases of the stigma strongly dusky; venation black.

Biltmore, North Carolina. Described from 1 female collected June 27, 1912, by W. L. McAtee.

Type.-Cat. No. 15244, U.S.N.M.

TENTHREDELLA FISHERI, new species.

Allied to *Tenthredella angulifera* (Norton), but the yellow on the mesonotum and the black pectus will readily separate it from this species. In some characters this agrees with the description of *ventralis* Say, but there is not sufficient evidence to prove that this is Say's species.

Female.-Length 10.5 mm. Labrum short, anterior margin broadly rounded; clypeus arcuately emarginate, the lobes truncate; supraclypeal foveæ small, punctiform; supraclypeal area flat; antennal furrows complete but not sharply defined; ocellar basin shallow, V-shaped above the anterior ocellus; postocellar furrow straight, well defined; postocellar area nearly quadrate; postocellar line a little more than half as long as the ocellocular line; third antennal joint longer than the fourth; mesonotum shining, with a few scattered, well defined punctures; stigma tapering to the apex; second cubital cell distinctly shorter than the third; legs normal; sheath slightly concave above, slightly convex below, broadly rounded apically. Black; clypeus, labrum, mandibles except piceous apices, face below antennæ, two spots above the antennæ, cheeks, posterior margin of the head, inner margin of the eyes extending to the vertex and uniting with a band on the posterior margin of the head, two small spots on the posterior margin of the postocellar area, spot on sides of the pronotum, posterior margin of the pronotum, tegulæ, lateral margin of the prescutum, two spots on the scutum just behind the prescutum, large spot on the scutellum, scutellar lobe, vertical spot on the

anterior part of the mesepisternum, a longitudinal spot on the posterior part of the mesepisternum, posterior part of the mesepimeron, spot on the metepisternum, sides of the propodeum, transverse median spot on the posterior margin of the propodeum, metapostscutellum, and median, longitudinal line on the tergum, ventral aspect of the tergum and sternum, yellow; legs black; 4 anterior legs beneath yellow; most of the 4 anterior tibiæ and tarsi yellow; posterior trochanters and the base of the posterior femora beneath, most of the posterior tibiæ basally, yellow; wings hyaline, iridescent, costa yellowish; venation black.

Plummers Island, Maryland. Described from 3 females, the type collected July 7, 1907, by A. K. Fisher, for whom the species is named; 1 paratype collected July 21, 1907, by A. K. Fisher; the other paratype collected May 30, 1908, by W. L. McAtee.

Type.-Cat. No. 15245, U.S.N.M.

Subfamily ATHALIINÆ

Genus ATHALIA Leach.

ATHALIA LUGENS INFUMATA (Marlatt).

Through the kindness of the Imperial Entomologist of Pusa, India, a specimen of this subspecies has been sent to me for study. It was collected at Lebong, India, September, 1908, which adds a new locality for this form.

Subfamily PHYMATOCERINÆ.

Genus TOMOSTETHUS Konow.

TOMOSTETHUS NIGRANS Konow.

A female which can not be separated from European specimens of this species was collected at Lebong, India, at an altitude of 5,000 feet, in September, 1908, and forwarded to me for study by the Imperial Entomologist of India.

Subfamily SELANDRIINÆ.

Genus PROSELANDRIA Rohwer.

PROSELANDRIA PERUVIANA, new species.

Of the species placed in *Proselandria*, the species here described is more closely allied to glabra (Kirby), but it may be separated from this last-mentioned species by the black antennæ and in having the mesepisternum white above. Judging from the description the species is related to *Stromboceros obscurus* Konow, but the black hind femora and minor structural characters will readily separate it from Konow's species.

Female.—Length 7 mm. Labrum narrowly rounded apically; clypeus convex, the lateral angles broadly rounded, the anterior

VOL. 45.

margin nearly truncate; inner margin of the eyes strongly converging toward the clypeus; supraclypeal area flat; supraclypeal foveæ poorly defined; middle fovea deep, punctiform, circular in outline; frontal foveæ punctiform, circular in outline, slightly above the middle fovea; antennal furrows represented by broad, shallow depressions above the frontal foveæ, ocellar basin obsolete ventrally but indicated dorsally by the ridges converging behind the anterior ocellus: postocellar area defined laterally by elongate furrows; postocellar furrow obsolete; postocellar line slightly shorter than the ocellocular line: antennæ long and slender, pedicellum about twice as long as the apical width, third antennal joint about one-fourth longer than the fourth; thorax normal; stigma slightly broader near the subangulate base, gently rounded to the apex; third cubital cell decidedly longer than the second; transverse median beyond the middle of the discoidal cell; legs normal; sheath very narrow, straight above, truncate apically, oblique below to the rounded apex. Black; clypeus, labrum, pronotum, tegulæ, first perapteron, anterior margin of the prepectus, dorsal two-thirds of the mesepisternum, four anterior legs except a spot at the apex of the femora above to the apices of the tibiæ and the intermediate tarsi, and the trochanters white; propodeum and abdomen except the two apical segments reddish yellow; wings dusky hyaline; venation black.

Rio Charape, Peru. Described from 1 female collected September 12, 1911, by C. H. T. Townsend.

Type.—Cat. No. 15311, U.S.N.M.

Genus STROMBOCEROS Konow.

Subgenus NEOSTROMBOCEROS Rohwer.

The type of this subgenus has the clypeus arcuately emarginate. To use the character of the clypeus as generic or subgeneric will make it necessary to add a new subgenus, which at present seems unwise. The original description should, therefore, be amended to read: Clypeus truncate or arcuately emarginate.

STROMBOCEROS (NEOSTROMBOCEROS) METALLICA Rohwer.

This species is evidently related to *Stromboceros cenchralis* Konow, which Enslin says is a synonym of *albicomus* Konow, but may be separated from *cenchralis* by the shape of the sheath. Konow describes the sheath of *cenchralis* as "subacuminate." The sheath of *metallica* is truncate apically.

STROMBOCEROS (NEOSTROMBOCEROS) CÆRULEICEPS (Cameron).

Clypeus truncate. Enslin considers *cæruleiceps* (Cameron) to be synonymous with *lævis* Konow. He may be correct; I have not seen the type of either species, but a species which agrees with the

original description of *cæruleiceps* and comes from approximately the same locality differs from the original description of *lævis* in having the clypeus truncate. Konow describes the clypeus of *lævis* thus: "Brevi, punctato, apice late emarginato."

The following characters may be useful in the determination of this species: Supraclypeal area rectangular in outline, flat; middle fovea large, walls sloping, quadrate in outline; frontal foveæ small, punctiform, circular in outline; antennal furrows ending in punctiform foveæ just above and inside of the frontal foveæ; a deep, large depression in front of the anterior ocellus, a furrow from anterior ocellus to the poorly defined postocellar furrow; sheath broad, straight above, broadly rounded apically, sharply tapering below.

STROMBOCEROS (NEOSTROMBOCEROS) ASSAMENSIS, new species.

In Enslin's table of the Oriental species of *Stromboceros* this runs to *lævis* Konow and *congener* Konow. It differs from both of these in having the apex of the femora yellowish and in the different conformation of the head.

Male.—Length 6.5 mm. Clypeus, truncate; supraclypeal area, rectangular in outline, slightly convex above; middle foveæ, deep, punctiform, circular in outline; frontal foveæ, punctiform, circular in outline; antennal furrows, faint, shallow; ocellar basin represented by a depression which is open below and V-d above; postocellar area completely defined by furrows, about one and one-half times as wide as long; postocellar line a little more than half as long as ocellocular; pedicellum, longer than wide; third antennal joint, about one-third longer than fourth; stigma, gently rounded below, transverse radius, nearly interstitial with the third transverse cubitus; first transverse cubitus, obsolete; hypopygidium, narrowly rounded; tarsal claws, cleft. Black; head with a faint bluish tinge; labrum, posterior margin of pronotum, first perapteron, apices of coxæ, trochanters, apices of femara, and tibiæ (except apex) yellowish white. Venation, dark brown; wings, subhyaline.

Khasi Hills, Assam; one to three thousand feet. One male collected March 17, 1907. Received from the Imperial Entomologist of Pusa, India.

Type.-Cat. No. 1676, U.S.N.M.

Subfamily NEMATINÆ.

Genus PTERONIDEA Rohwer.

PTERONIDEA PULCHELLA, new species.

In Marlatt's revision of North American Nematinæ this runs to *populi* Marlatt. It is separated from that species in not having the antennal furrows strongly depressed above the crest, in the shape of the ocellar basin and other characters. 280

Female.-Length 7.5 mm. Clypeus deeply, arcuately emarginate, lobes subtruncate; supraclypeal area triangular in outline, strongly convex; supraclypeal foveæ deep, confluent with antennal foveæ; middle fovea circular in outline; walls sloping; crest sharply defined centrally, not broken; ocellar basin U shaped, the legs slightly diverging toward the crest, V-d posteriorly; antennal furrows obsolete; shallow depressions laterally; postocellar furrow not sharply defined; postocellar area not defined laterally; postocellar line much longer than the ocellocular; antennæ tapering, third and fourth joints subequal; stigma short, rounded below; cerci long, tapering; sheath broad, slightly convex above, apex narrowly truncate and obliquely rounded to base; inner tooth of claws shorter than the outer. Black; labrum, palpi, tegulæ, coxæ except above (basally), trochanters, four anterior tibiæ and tarsi (except black spot on apex of median tibiæ above), and basal third of hind tibiæ, whitish; angles of the pronotum, and femora (except apex of hind pair) rufo-ferruginous; abdomen (except the two basal tergites), cerci and sheath bright cherry red; wings hyaline, iridescent; venation, including stigma, black; costa vellowish. The above description of the color is from a fresh specimen.

Cabin John, Maryland. One female collected April 28, 1912, by M. C. van Duzee.

Type.-Cat. No. 14797, U.S.N.M.

PTERONIDEA VANDUZEEI, new species.

Related to *Pteronidea mendica*, but may be separated from this species by the triangular-shaped middle fovea and low ocellar basin

Female.-Length 5.5 mm. Clypeus angularly emarginate, lobes rounded: supraclypeal foveæ confluent with antennal foveæ; supraclypeal area convex; middle fovea triangular, breaking through the crest; antennal furrows sharply defined, biangulate; ocellar basin well defined, triangular in outline, the base (which is the crest) being much longer than the sides; depression behind the anterior ocellus V-shaped, the legs of the V forming furrows behind the lateral wall of the ocellar basin; postocellar furrow angulate anteriorly, not sharply defined; postocellar area well defined, about two and a half times as wide as the lateral length; postocellar line shorter than the ocellocular; third antennal joint distinctly shorter than the fourth; stigma broader near base, rounded below; sheath straight above, rounded from apex, rather broad. Greenish (in life); palpi, apices of the mandibles, antennæ, area inside of antennal furrows above crest, mesonotum except sutures, apex of scutellum, metanotum, abdomen centrally above, and the tarsi, black; wings hvaline; venation black; stigma and costa pallid.

Chain Bridge, Virginia. One female collected April 26, 1912, by M. C. van Duzee, for whom the species is named.

Type.-Cat. No. 14796, U.S.N.M

Genus PRISTIPHORA Latreille. PRISTOPHORA XANTHOTRACHELA, new species.

Related to *Pristophora pallicoxa* Rohwer, and may be separated from that species by the shorter third antennal joint, elongate middle fovea, black supraclypeal area, and other minor characters.

Female.-Length 5.5 mm. Labrum truncate apically; clypeus very slightly, arcuately emarginate; supraclypeal foveæ punctiform, deep, confluent with antennal foveæ; supraclypeal area narrow, convex; middle fovea deep, elongated; antennal furrows obsolete; postocellar furrow obsolete; postocellar area defined laterally by punctiform foveæ, about five times as wide as long; postocellar line distinctly longer than the ocellocular; antennæ longer than head and thorax, tapering; third antennal joint about one-fifth longer than fourth; head below the supraorbital line coarsely granulate; thorax shining, sparsely punctured; stigma short, broadest a little basad of the middle, tapering apically; first transverse cubitus wanting; third cubital cell a little longer than the apical width; sheath rather broad, slightly convex above, rounded from the upper apex to the base. Black; apex of the clypeus, labrum, mandibles (except piceous apices), palpi, pronotum broadly, tegulæ, four anterior legs, posterior legs (except a spot on dorsal apices of femora, apical fourth of tibiæ and the tarsi which are black) and venter bright yellow; wings hyaline, iridescent; venation, including stigma, dark brown; costa vellowish brown.

Cabin John, Maryland. One female collected April 29, 1912, by M. C. van Duzee.

Type.-Cat. No. 14798, U.S.N.M.